Reviewer’s report

Title: The gut microbiome as a target for regulatory T cell-based immunotherapy: Induction of regulatory lymphocytes by oral administration of anti-LPS enriched colostrum alleviates immune mediated colitis

Version: 0 Date: 30 Sep 2015
Reviewer: Yue Li

Reviewer's report:

This is a basic research study to determine the immune modulatory effect of anti-LPS enriched hyperimmune colostrum, and its ability to induce Tregs and alleviate immune mediated colitis. This study is well designed and the article is also well organized. This is the first study shows the effect of anti-LPS antibody in animal model of colitis. Some revision is suggested as following.

- Revisions

Page 4, METHODS, Line 39-40
Each group of mice has only 4 mice, which might be a key factor leading to statistic significance.

Page 4, METHODS, Line 50-51
Grading of colon histology. More details of how the colon biopsy has been processed and the criteria of the grading system need to be addressed in Methods.

Page 6, RESULTS, Line 14-27
To describe the histology results, a table with P values might be more suitable than the figure.

Figure 2B
Please add the magnification times.

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Yes

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published

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